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ABSTRACT

This technical and vocational education (TVE) profile on Fiji is one in a series of profiles of UNESCO member countries. It is intended to be a handy reference on TVE systems, staff development, technical cooperation, and information networking. Part I, General Information, covers the following: location, area, and physical features; economic and labor force situation; industrial needs and labor demands; and technician education. Part II, Structure of Education, uses tables to illustrate number of schools and classification of teachers. Part III, Type of Technician Education, describes these types: school-based vocational program, Fiji National Training Council, Fiji Institute of Technology (FIT), and technical institutions of the private sector. Part IV, Technician Training at FIT, considers these aspects: entry requirements, enrollments and outputs, course structure (examples in the School of Building and Civil Engineering), the apprenticeship course, administration of FIT, staff qualifications, selection and recruitment of staff, processes of technician curriculum development, student evaluation, resource center, classroom situations, and technical teacher training (programs and staff approval). Part V, Trends, summarizes trends in technical and vocational education and training. Part VI lists the addresses of and courses offered at the Fiji Institute of Technology, and the Telecommunication Training Centre. (YLB)

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ED 399 370

NATIONAL PROFILES IN TECHNICAL AND VOCATIONAL EDUCATION IN ASIA AND THE PACIFIC

Fiji

UNEVOC
International Project on Technical and Vocational Education

U.S. DEPARTMENT OF EDUCATION
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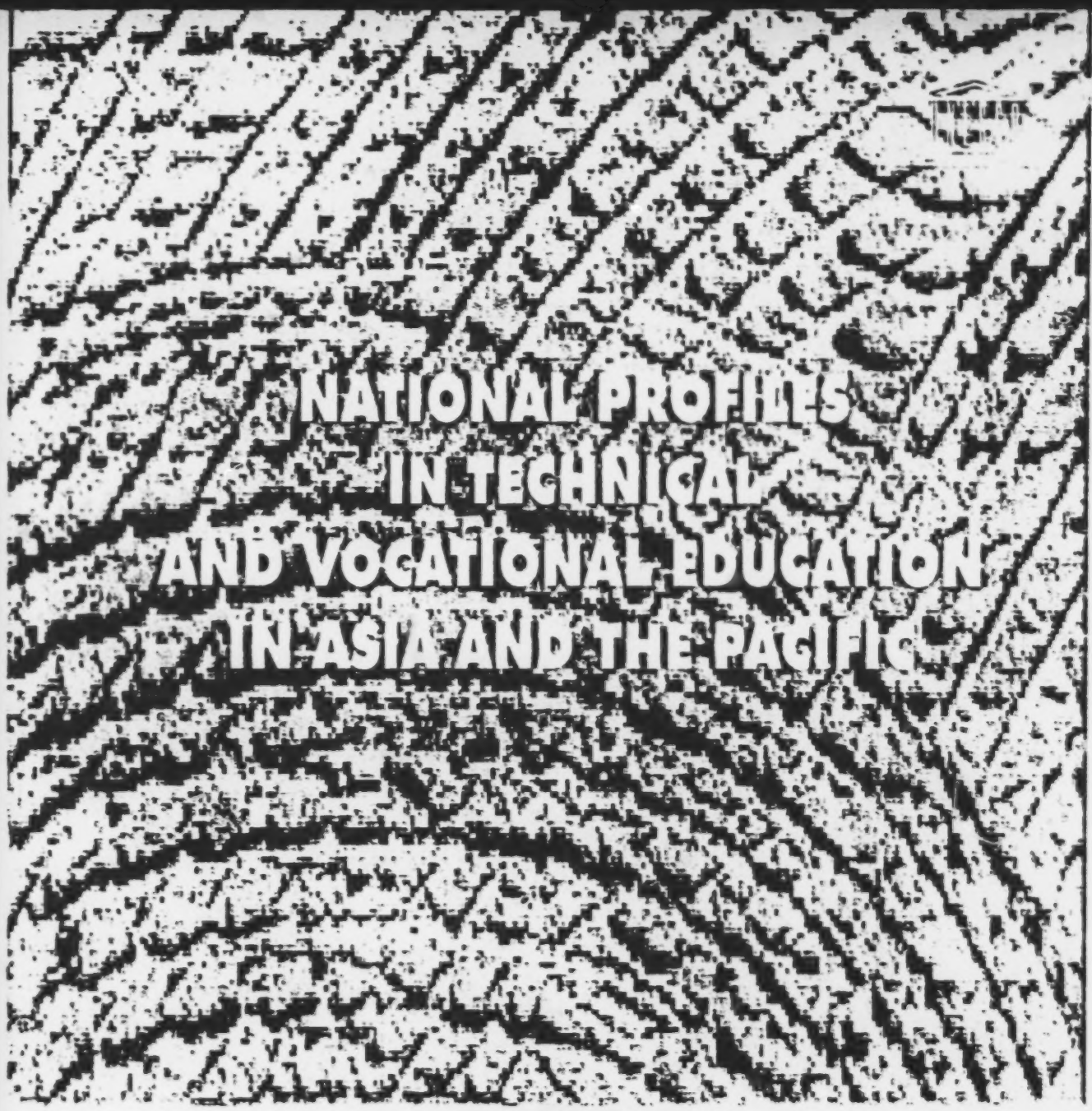

Fiji

UNESCO PRINCIPAL REGIONAL OFFICE FOR ASIA AND THE PACIFIC, BANGKOK, 1995

This volume is one of a series of member country profiles on Technical and Vocational Education of the following member countries:

AFGHANISTAN
AUSTRALIA
BANGLADESH
BHUTAN
PEOPLE'S REPUBLIC OF CHINA
FIJI
INDIA
INDONESIA
ISLAMIC REPUBLIC OF IRAN
JAPAN
REPUBLIC OF KOREA
MALAYSIA
MYANMAR
NEPAL
ISLAMIC REPUBLIC OF PAKISTAN
PAPUA NEW GUINEA
PHILIPPINES
SINGAPORE
SRI LANKA
THAILAND
SOCIALIST REPUBLIC OF VIET NAM

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FOREWORD

Technical and vocational education has always been an important component of UNESCO's consecutive Medium Term Plans. The basic objective of this programme is to support the efforts of Member States to link education systems more closely to the world of work and to promote the expansion and improvement of technical and vocational education in the light of changing employment needs.

The Colombo Plan Staff College for Technician Education (CPSC) also dedicates itself primarily to enhancing the growth and development of the technician education systems in its member countries which are located in the Asia and Pacific region. Its programmes, projects and activities are geared to provide the needed impetus for the professional development of senior level personnel involved in technician education development efforts.

UNESCO has launched an International Project on Technical and Vocational Education (UNEVOC) as of 1992 in co-operation with the Government of Germany, ILO, FAO, UNDP and NGOs interested in the reform of technical and vocational education. This project focuses on exchanging information, research and experiences on policy and programme issues in technical and vocational through a network of co-operating institutions.

In a spirit of co-operation between UNESCO and CPSC, under UNEVOC, an attempt is being made to compile and publish studies on the development of technical and vocational education in Member States in the form of TVE profiles of 21 countries. It is hoped that this series will serve as a handy reference information on TVE systems, staff development, technical co-operation and information networking. These studies have been possible because of the full co-operation to UNESCO PROAP and CPSC by all concerned in the Member States.

The opinion expressed in this study are those of the authors and do not necessarily reflect the position of UNESCO and CPSC in this regard. This profile on Fiji was prepared by Prof. Takashi Uematsu, Seconded Faculty Member to CPSC by the Government of Japan.

C.K. Basu
Director, CPSC

Victor Ordonez
Director, UNESCO PROAP

Part I

GENERAL INFORMATION

1.1 Location, Area and Physical Features

Fiji is situated in the hub of the South West Pacific. It is made up of about 332 islands which vary in size from 10,000 sq km to tiny islets, a few meters in circumference. About a hundred of these islands are usually inhabited while most of the remaining islands, which are sufficiently large in area are used for temporary residence or for occasional plantation.

Fiji is located between longitudes 174 degrees east and 177 degrees west and latitudes 15 degrees and 22 degrees south. The 180th meridian apparently passes through the Fiji Group, but the international date line is adjusted so that the entire archipelago, together with the neighbouring island kingdom of Tonga may conveniently fall into the same time zone. Fiji occupies a total land area of 18,272 sq km Viti Levu and a Vanua Levu are the two main islands with an area of 10,429 and 5,556 sq. km. respectively.

Fiji became independent in 1970 as a Dominion within the Commonwealth of Nations with a constitution based on the "Westminister" model. Following the two coups constitutional status of the country changed in 1987 when it was declared a Republic with a President as Head of State. An Interim Government, charged with restoring economic stability and returning the country to a parliamentary system had run the country for almost five years. Considerable success has been achieved in restoring the economy and a new constitution was promulgated in July 1990 and the General Elections in June 1992 put into Parliament an elected Government.

The latest population census held in 1986 recorded Fiji's population at 715,375. This was an increase of 127,307 over the 1976 population giving an average annual population growth rate of 2.0 per cent per annum over the ten years.

There is ethnic diversity in Fiji where two major races the Fijians (46 per cent) and the Indians (48.7 per cent) make up 94.7 per cent of the total population while the remaining 5.3 per cent comprises Europeans, Chinese and other Pacific Islanders.

1.2 Economic and Manpower Situation

Fiji's economic and manpower situation changed abruptly following two coups in 1987 which interrupted a long period of political stability temporarily disrupted the economy and led to a sharp reduction in investment, employment and incomes.

Due to emigration resulting from the changed political situation, the population of Fiji fell in 1987 for the first time in 50 years. Since the coups, however, substantial progress has been made toward restoration of more normal economic conditions. There was a major economic recovery in 1989 and population growth has continued. Nevertheless, the developments of the post-coups period have important manpower implications.

The most salient feature of the manpower situation following the political changes in 1987 is the emigration of approximately 6000 persons per year between 1987 and 1990. A substantial portion of the emigrants fall within the occupations classification of professional, technical, administrative, managerial, clerical and supervisory personnel. This represents a substantial loss of human capital. This pattern of emigration is continuing although indications are that the rate of emigration may be declining.

The second most salient feature of the manpower situation of the post-coup era is a significant shift in economic development strategy from an inward-looking to export oriented approach. Government has embarked on a stabilization and structural adjustment programme centred on strengthening competitiveness by providing an economic environment conducive to private sector investment and growth. In addition to macro-economic stabilization measures and tax reform, there are three key elements of the programme which have direct ramifications for manpower planning.

These are:

1. Trade Reforms
2. Foreign Investment and Export Promotion and
3. Public Enterprise Reform.

1.3 Industrial Needs and Manpower Demands

The employment situation has closely followed the economic situation. The coup - year of 1987 represented a high unemployment followed by a rapid recovery in 1988. The post-coup period has seen a steady decline in unemployment. Although unemployment among the better educated and trained work force was regarded a problem in the mid 1980's, it became low during the post-coup period. Three factors account for low unemployment in recent years. Firstly, once recovery got underway after the economic decline the increases in capacity utilization enabled rapid increases in employment. Secondly, the high emigration had created many vacancies into which job seekers have been absorbed and thirdly the new economic environment has stimulated entrepreneurial activity and resulted in the creation of new jobs.

The new economic development strategy, involving a shift towards a more outward looking, export-oriented approach will lead to changes in the economic structure. As the economy is opened and protection falls, whole sectors which have survived under protection will face international competition.

Deregulation will allow competitive areas to develop, as resources move out of less competitive areas and move into more competitive areas. Manufacturing is expected to be the major sector benefiting from trade reforms. In the search for competitiveness, new and more efficient technologies will be introduced, new products will be manufactured, and new markets will be opened.

One recent study estimated that about 13,500 new workers would be required each year from 1993 through 1998 to meet the growing needs of industry. These figures take into consideration the expected emigration, work-force attrition and the expected development of new jobs in the country. The estimates were reviewed and confirmed by the Fiji National Training Council. However, in other official documents produced by the Ministry of Finance and the Central Planning Office, the total figures range from 6,000 to 10,000 new employees each year from 1993 through year 2000. The World Bank considered the high estimate (13,500) to be perhaps too optimistic as the economy would have to sustain a high level of foreign capital investment to produce such a large number of new jobs. On the other hand. the estimate of 6,000 new jobs was considered too conservative over the medium to long term, as the economy since 1987 has demonstrated a sustained growth rate that put on more demand than originally estimated. Therefore, a moderate estimate of 8,500 new employees per year is viewed to be appropriate.

Although the above data provides a moderate estimate of labour demand over the next five years or so, it does not provide information on the skill levels of the work force. This information is essential for planning in TVET. A recent survey of employers sponsored by the Fiji National Training Council has, however, provided an estimate of the skill levels of the workers needed which is similar to the requirements of most developing nations.

From this distribution, it is estimated that, as from 1993 though to 1998, each year, there will be a need for an increase of about 4,600 low to medium level skilled workers, 2,500 higher level skilled workers and technicians, 1,200 professionals and engineers, and 100 managers/others.

1.4 Technician Education

As the economy becomes more outward-looking and export oriented, and as growth is driven by more private sector investment, new knowledge and skills will be required. Although new knowledge and skills are required in any dynamic economy, the requirements in the present case will be exceptional for two reasons. First the substantial brain drain that Fiji still faces and will continue to face in the near future necessitates manpower replacement levels far higher and greater than in the past. Second, the rapid change in direction of the economic development strategy since 1987, and the consequent changes in technology and composition of the output, will necessitate not only increases in manpower requirements but also changes in composition.

To meet the above increased technician education requirements the following action is underway:

- Upgrading of the Fiji Institute of Technology (FIT)
- Establishment of two Secondary Technical and Vocational Centres each with 500 to 600 students enrolment capacity.
- Establishment of TVE facilities at an existing Secondary School site (Ratu Kadavulevu School)
- Strengthening of the Fiji College of Advanced Education
- Improving efficiency in general education
- Upgrading Pre-School services
- Consolidation of Form 7 Education

The upgrading of FIT involves giving it greater autonomy to enable it respond more positively to the job market as the main source of technical skills for the economy and to offer a wider range of courses at certificate and diploma levels and ultimately at degree level in selected areas.

This change should be accompanied by investment in facilities and staff to upgrade the quality of its output. It is proposed to draw up a plan for the renovation of existing facilities and equipment and the introduction of the equipment. Assistance would also be sought for operational expertise to improve curriculum preparation, administrative support and other operational functions. A programme of staff upgrading would also be introduced.

FIT has between 5-10 per cent staff shortage annually and the need to upgrade the quality of teachers are pressing issues that must be addressed. The granting of autonomy to FIT will offer a number of opportunities to improve the situation somewhat, but there will continue to be a pressing need to train more and better teachers for higher levels of technology.

To upgrade FIT to polytechnic status it is estimated that about 100 lecturers and senior lecturers/administrators would require four years of fellowship training, leading to at least a four year college degree. An additional 40 persons would be trained additionally to reach a masters degree level.

The review of vocational education centres and new possibilities for vocational education in the future is of particular importance to the support of the national economic development effort as there is a need to establish a viable capacity to train low and medium level skilled workers at secondary school level.

Part II

STRUCTURE OF EDUCATION

2.1 Structure of Education

Structure of education is shown in the chart on page 18.

2.2 Number of Schools and Classification of Teachers

Table II-1 Number and Type of Schools (Social Indicators for Fiji)

Year	Primary	Secondary	Technical Vocational	Teacher Training	Total
1982	661	137	37	4	893
1983	660	148	37	3	840
1984	665	139	36	3	843
1985	668	139	42	3	852
1986	672	140	40	3	855

Table II-1 Classification of Teachers in 1986

Classification	Primary	Secondary	Technical Vocational	Teacher Training	Total
Trained Teachers in Government Service	4,228	1,939	146	16	6,329
Trained Teachers in Non-Government Service	64	237	24	17	342
Untrained (Licensed)	30	416	52	1	499
Part-time Grant-in-Aid Teachers Trained	-	63	-	-	63
Part-time Grant-in-Aid Teachers Untrained	-	24	-	-	24
Overseas Volunteer Teachers Trained	-	-	-	-	-
Overseas Volunteer Teachers Untrained	-	23	1	-	24
Total	4,322	2,702	223	34	7,281

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Part III

TYPES OF TECHNICIAN EDUCATION

3.1 School-Based Vocational Programme

The school-Based Vocational Programme offers an alternative course of study to students and adults who do not respond well to formal academic education. It is a practical oriented course designed to prepare young men and women to lead better and more satisfying life.

The aims of the programme are:

- To prepare individuals to learn continuously and develop basic technical skills and proper attitude to life;
- To provide necessary means to develop the capacity in the students for decision making with minimum supervision;
- To develop necessary qualities for active and intelligent participation to team work and leadership in the community;
- To provide opportunity to young men and women to develop skills for self-employment through programme training in technical and vocational subjects.
- Major components of the programme: Building Craft, Agriculture; Light Engineering and Home Craft. In addition to the above, English, Mathematics and Culture are taught as part of the total programme.

Number of centres: 29

Number of students: About 800

3.2 Fiji National Training Council (FNTC) (Handbook '92)

The role of the Fiji National Training Council is to provide non-formal training to those already in employment with a view to upgrading the skills already possessed by the tradesmen.

The objectives of the Council are to ensure that:

a) The available resources and facilities are co-ordinated to provide an adequate supply of persons with the requisite skill, knowledge and experience for employment.

b) The nature, quality and efficiency of training are to meet the needs of employers and employees.

c) The cost of training and administration are shared equitably between employers.

The basic concept of the training system is the modular unit. The necessary modules are selected as required by the specific training need.

N.T.C. is so structured that it can serve two functions. The primary function is training and development, which is in turn divided into a total of eleven(11)industry training boards as follows:

- **Apprenticeship Training Board**
- **Aviation and Travel Industry Training Board**
- **Commercial and Administration Training Board**
- **Construction Industry Training Board**
- **Electrical Engineering Training Board**
- **Engineering Industry Training Board**
- **Hotel and Catering Industry Training Board**
- **Manufacturing Industry Training Board**
- **Marine and Port Industry Training Board**
- **National Trade Testing Board**
- **National Productivity Board.**

Each Training Board conducts courses for employees offered from employers. Subjects, contents and duration of the courses vary depending on the nature and the target groups. All participants to these courses must be full-time employees, and they must be sponsored by their employers .

Besides these ordinary courses conducted by the Training Boards, there are some special courses and activities done by some peculiar Boards as follows.

The Apprenticeship Training Board is entrusted by the Government to train apprentices in collaboration with employers. Apprenticeship is a systematic programme of on-the-job and related theoretical training designed to produce a full trained journeyman or tradesman. It is designed to provide special skills and knowledge required of these journeyman and tradesman to be able to make maximum use of sophisticated machines and technologies in modern industries. The practical training of apprentices is provided by employers at job sites and the theoretical training is given by the Fiji Institute of Technology or any other approved training institution.

Youths interested in becoming apprentices apply directly to a firm or organisation of their choice selected from wide publicity regarding vacancies for apprentices in the newspapers in the form of advertisements.

Basic entry requirements for most of the trades are very similar. The minimum qualification required is that candidates must be able to undertake theoretical part of the training.

The minimum age required for entry is 15 years, and there are no maximum age limits.

Trades offered under apprenticeship are as follows.

Trade Level

a) Aircraft Maintenance
b) Automotive Electrical
c) Automotive Mechanic
d) Boiler making
e) Carpentry
f) Cook
g) Electrical Fitter Mechanic
h) Electronics
i) Fitting & Machining
j) Heavy Mobile Plant Mechanic
k) Joinery and Cabinet making
l) Marine Engineering
m) Navigation and Seamanship
n) Panel beating
o) Plumbing
p) Printing
q) Refrigeration and Air-conditioning
r) Saw Doctor
s) Shipwright
t) Welding and Fabricating

Technician level

a) Electrical Engineering
b) Telecommunication Engineering
c) Mechanical Engineering
d) Automotive Engineering

The duration of apprenticeship in each trade varies according to the complexity and depth to which the subjects and topics are taught in that particular trade. The apprenticeship period in each designated trade is as follows:

Trade Level

Fitting & Machining	-	5 years
Shipwright	-	5 years
Aircraft Maintenance	-	5 years
Saw Doctor	-	3 years

For all other remaining trades the duration is four years.

For **Technician Level Apprenticeship** the duration is 5 years. The Certificate of Apprenticeship is awarded once an apprentice satisfactorily fulfills the terms of the contract.

The National Trade Testing Board runs the **Trade Testing Scheme** at three different levels;

Tradesman Class I - Final Level
Tradesman Class II - Intermediate Level
Tradesman Class III - Basic Level

which are not part of any training programme but are available when any tradesman feels he is competent to do the test under some necessary qualification conditions.

Trade tests conducted at the three levels are both practical and theoretical. The theoretical part of the Tradesman Class I test is written whilst that for the Tradesman Class II test and the Trades man Class III test are either written or oral at the option of the candidate. The oral test is conducted in either English, Fijian or Hindustani.

The National Productivity Board is offering the following services:

- **Training**
  Three training programmmes in QCC are offered according to target group.
- **Consultancy**
  The Board offers consultancy services to advise and assist organisations in implementing and sustaining QCC activities.
- **Promotion**
  The board is supplementing the efforts of individual organisations to implement the QCC Concept by mounting promotional activities.

These activities are aimed at persons in top as well as Senior Managerial positions, Senior Government Officials and Trade Union Leaders.

3.3 Fiji Institute of Technology (FIT)

The Fiji Institute of Technology, under the Ministry of Education, is catering technician education in all skill areas and at various levels including trade level courses.

The Institute normally adopts the block-release system of 12 weeks duration per stage. This seems to provide a suitably proportioned period of training of technicians in that over the four year period of apprenticeship, the trainee would have completed the 3 to 4 stages at the Institute totaling 36 to 48 weeks or 1,260 to 1,680 hours, depending on the skill to be specialized in. Likewise, he or she would have 160 weeks of on-the-job training in the four years of apprenticeship or approximately 6,400 hours.

3.4 Technical Institutions of the Private Sector

1. Firm-Based Training

Currently, firms provide about 63% of all low to medium level skill training. In Fiji, the larger firms offer a wide array of skill and non-skill related training programmes. Most small firms offer some informal on-the-job training and non-skill related employee training. Typically, they are not able to provide structured skill training programmes. They usually seek to employ skilled workers from other sources.

When looking for ways to improve employer participation, one sometimes finds that policy constraints are a factor that limits the participation of firms in training.

The Government is well aware of the wisdom of private employer participation and has, since 1970 made an attempt to provide a healthy climate for an increased contribution in this area.

2. Proprietary Schools

There are about 24 proprietary schools in Fiji. These are generally small and have access to minimal facilities for training. They currently enrol a total of about 1,000 students each year. The schools offer secretarial and commerce courses training at the medium to high skill levels.

The Government does not contribute any financial support to these institutions. However, the Ministry of Education does control the establishment and operation of the schools through regulations governing such establishments.

3. Non-Governmental Training Organizations

There are six major NGOs that offer skill training. They are all religious organizations that, for the most part, offer training programmes for special groups within the Fijian population. One of the institutions, namely; Monfort Boys Town, is considered to have some of the better capacity for medium level skill training programmes in the country.

All the NGOs have an excellent relationship and interaction with the Government. Monfort, for instance, receives grant through the budgetary process.

a) Monfort Boys Town (Roman Catholic Brothers)
b) L. D. S. Technical Institute (Mormon Church)
c) Fulton College (Seventh Day Adventist)
d) Tutu (Roman Catholic)
e) Navuso Agricultural School (Methodist)
f) Chevalier Farming School (Roman Catholic)

The above institutions normally cater for early school-leavers and those who are denied opportunities for further education due to family or social problems.

It may be possible in future for these students to be exempted from the first stage, should they seek enrollment at the FIT later.

Industries are keen to employ graduates from the Monfort Boys Town because of the quality of training and their discipline.

Part IV

TECHNICIAN TRAINING AT FIT

Of the post-secondary institutions in the country the Fiji Institute of Technology is by far the largest. Currently, FIT has about 4798 full-time equivalent students enrolled in a wide variety of higher level skill and technician training programmes. This amounts to more than 50% of the total institutional capacity for higher level skill training in Fiji.

FIT for example, offers a very wide variety of courses ranging from short-term upgrading courses to long term programmes taking at least a few years to complete. Graduation records show that 600-800 students (due to varying lengths of programmes, requirement for industry experience, and dropouts) are expected to graduate each year at FIT. The total number of graduates from the four schools would not be expected to exceed 1,200 graduates each year to the end of the decade.

FIT is also undergoing a major restructuring programme. The Government has decided to reorganize the Institute into a self-managing, autonomous body. In 1992, phase one was implemented by the Government.

Although FIT does many things well and has remained fully operational despite serious financial and personnel limitations over the past years, many policy and organizational issues would have to be addressed in the near future. If these issues are left unresolved and unattended, then there is a greater possibility of a decline in the effectiveness of the institution as it prepares for autonomy status.

FIT has developed on an ad hoc basis with donor agencies providing funds for separate projects and hence the need for a master plan for greater coordination of the existing facilities and orderly expansion, if any, in the future.

The facilities are generally adequate for the current programmes but there is a need to inject more resources in preparation for the introduction of advanced and specialized courses required by the industry.

In addition to the facilities and the equipment, the training and retention of staff is essential as well as the need for greater liaison with the industry so as to be in a position to respond to their needs.

4.1 Entry Requirements

Initial entry qualification for all technician training is to pass in Fiji Junior Certificate (4th Form) including a pass in English, Mathematics and Basic Science or Physics.

For Ordinary Diploma Courses, the. qualifications are a pass in Fiji School Leaving Certificate or University Entrance. The student intake is mainly from industrial private firms or government departments as sponsored students.

Private students fill some 25 to 30% of the total number of places available. As a rule sponsored students get a preference over the private students for places on the course.

For Diploma Courses, Ordinary Diploma or its equivalent (overseas training) is required. Sometimes students may be allowed to take certain units in the Diploma programme without having met all the requirements of the Ordinary Diploma programme, subject to the approval of the School Board.

4.2 Enrolments and Outputs

Enrolments for trade courses are done on employer's request under the FNTC Apprenticeship scheme. Ordinary Diploma and Diploma level courses attract students sponsored by firms, central government, regional countries and also private students. Most of these courses are Term (12 weeks) or Semester (24 weeks) based and certification is done when a student completes the required number of Units or Stages. For full-time courses running for 1 or 2 years, exams are held at the end of the course. Pass rates are high.

4.3 Course Structure (examples in the School of Building and Civil Engineering)

Chart III-1. Diploma and Ordinary Diploma Programme Flow Chart 1992

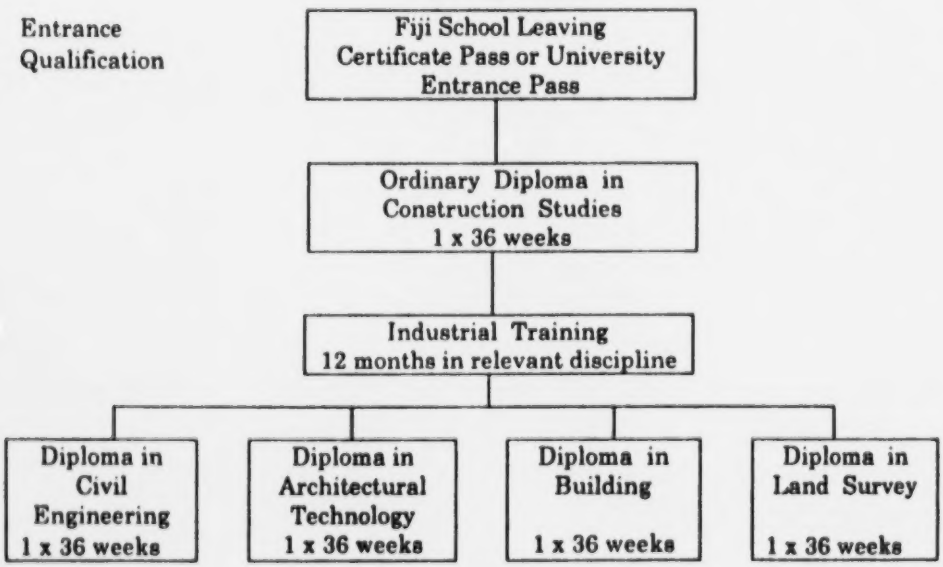
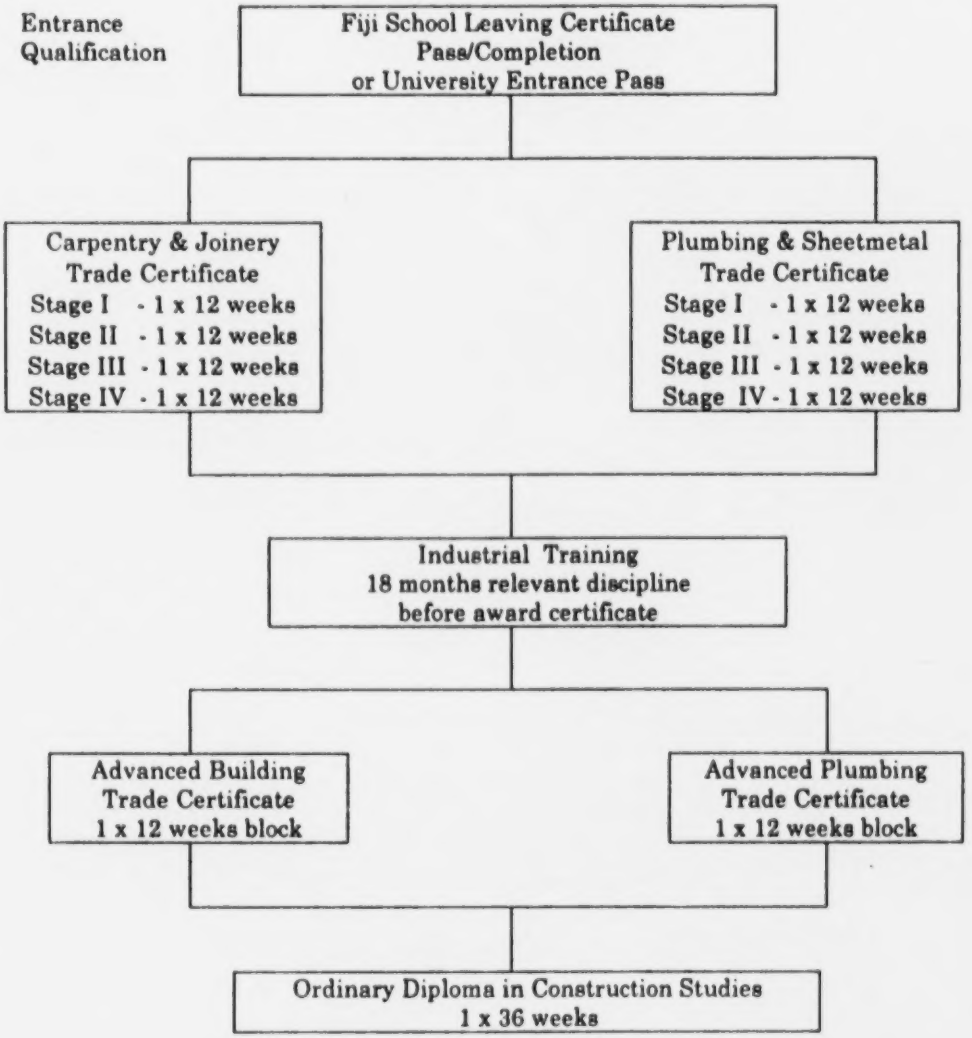

Entrance Qualification
Fiji School Leaving Certificate Pass or University Entrance Pass
Ordinary Diploma in Construction Studies 1 x 36 weeks
Industrial Training 12 months in relevant discipline
Diploma in Civil Engineering 1 x 36 weeks
Diploma in Architectural Technology 1 x 36 weeks
Diploma in Building 1 x 36 weeks
Diploma in Land Survey 1 x 36 weeks

Chart III-2 Trade Certificate & Advanced Trade Programme
Flow Chart - 1992


Entrance Qualification
Fiji School Leaving Certificate Pass/Completion or University Entrance Pass
Carpentry & Joinery Trade Certificate
Stage I - 1 x 12 weeks
Stage II - 1 x 12 weeks
Stage III - 1 x 12 weeks
Stage IV - 1 x 12 weeks
Plumbing & Sheetmetal Trade Certificate
Stage I - 1 x 12 weeks
Stage II - 1 x 12 weeks
Stage III - 1 x 12 weeks
Stage IV - 1 x 12 weeks
Industrial Training
18 months relevant discipline before award certificate
Advanced Building Trade Certificate
1 x 12 weeks block
Advanced Plumbing Trade Certificate
1 x 12 weeks block
Ordinary Diploma in Construction Studies
1 x 36 weeks

4.4 The Apprenticeship Course

The courses offered under the Trade Certificate Courses will be made up of 18 Units per course. Trade Certificate courses will consist of a total of 1440 hours consisting of three categories of subjects namely Common, Core and Practical subjects as depicted in Table III-1.

A stage by stage course progression that covers the 4 years Trade Course Programme is shown in Chart III-3.

A flowchart of the overall course structure commencing at the Trade Certificate level and all the way up to the degree level is shown in Chart III-4. Presently the highest courses offered at FIT is the Diploma Programme; the other higher diploma and degree courses will be introduced in a couple of years time.

Table III-1 General Structure of the Courses

The overall course structure will be base of **Certificate = 18 Units Passed**

Hours	Type	Subject	Assessed
80	Common	Technical Communications	Exam
80		Technical Drawing for Craft Students	C/W
80		Applied Materials Technology 1	C/W
80		Applied Materials Technology 2	C/W
80		Trade Mathematics 1	Exam
80		Trade Mathematics 2	Exam
80	Core	Craft Science 1	Exam
80		Craft Science 2	Exam
80		Workshop Technology 1	Exam
80		Workshop Technology 2	Exam
80		Workshop Technology 3	Exam
80		Workshop Technology 4	Exam
80	Practical	Workshop Project 1	C/W
80		Workshop Project 2	C/W
80		Workshop Project 3	C/W
80		Workshop Project 4	C/W
80		Workshop Project 5	C/W
80		Workshop Project 6	C/W
1,440	**18 Units**	**Trade Certificate**	

The ***Common Units*** are used to create **Electives** for substitution.

Course Patterns and Aims

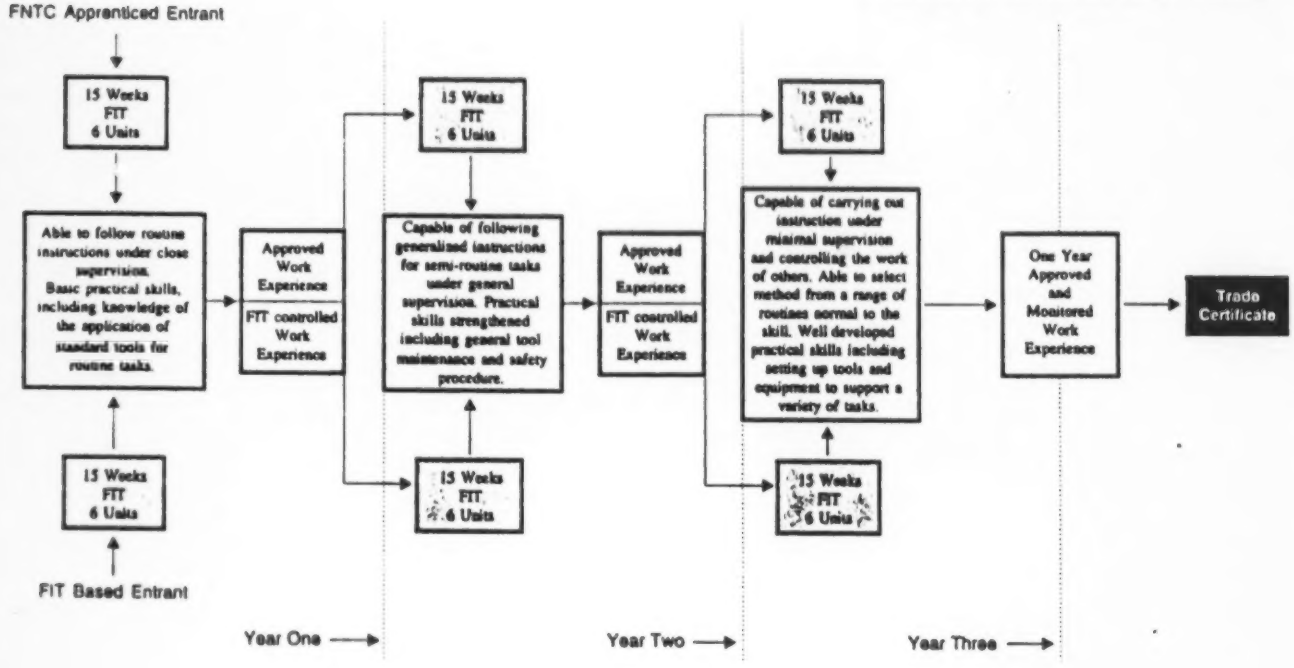

FNTC Apprenticed Entrant
15 Weeks FIT 6 Units
Able to follow routine instructions under close supervision. Basic practical skills, including knowledge of the application of standard tools for routine tasks.
15 Weeks FIT 6 Units
FIT Based Entrant
Approved Work Experience
FIT controlled Work Experience
15 Weeks FIT 6 Units
Capable of following generalized instructions for semi-routine tasks under general supervision. Practical skills strengthened including general tool maintenance and safety procedure.
15 Weeks FIT 6 Units
Approved Work Experience
FIT controlled Work Experience
15 Weeks FIT 6 Units
Capable of carrying out instruction under minimal supervision and controlling the work of others. Able to select method from a range of routines normal to the skill. Well developed practical skills including setting up tools and equipment to support a variety of tasks.
15 Weeks FIT 6 Units
One Year Approved and Monitored Work Experience
Trade Certificate
Year One
Year Two
Year Three

Chart III-3. Course Patterns and Aims

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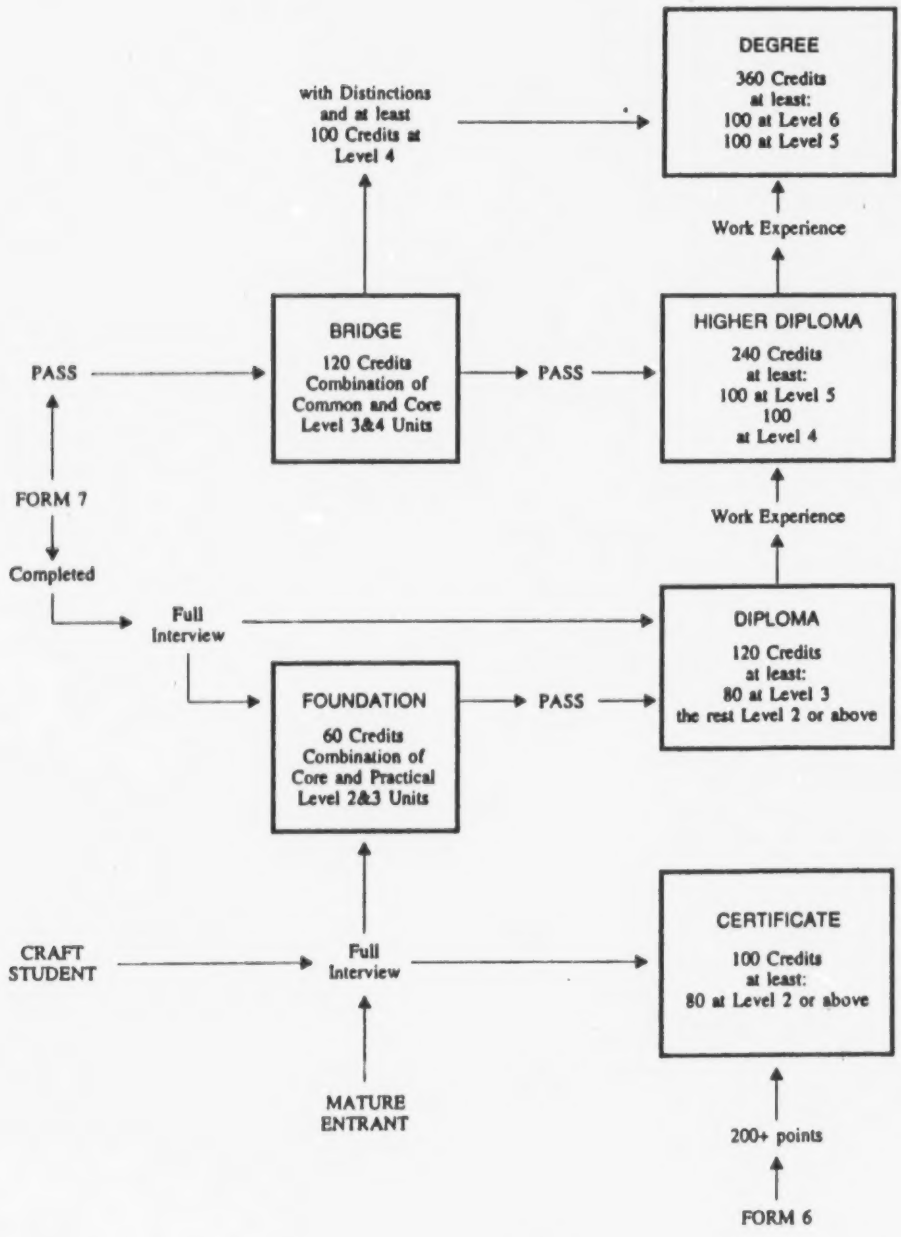
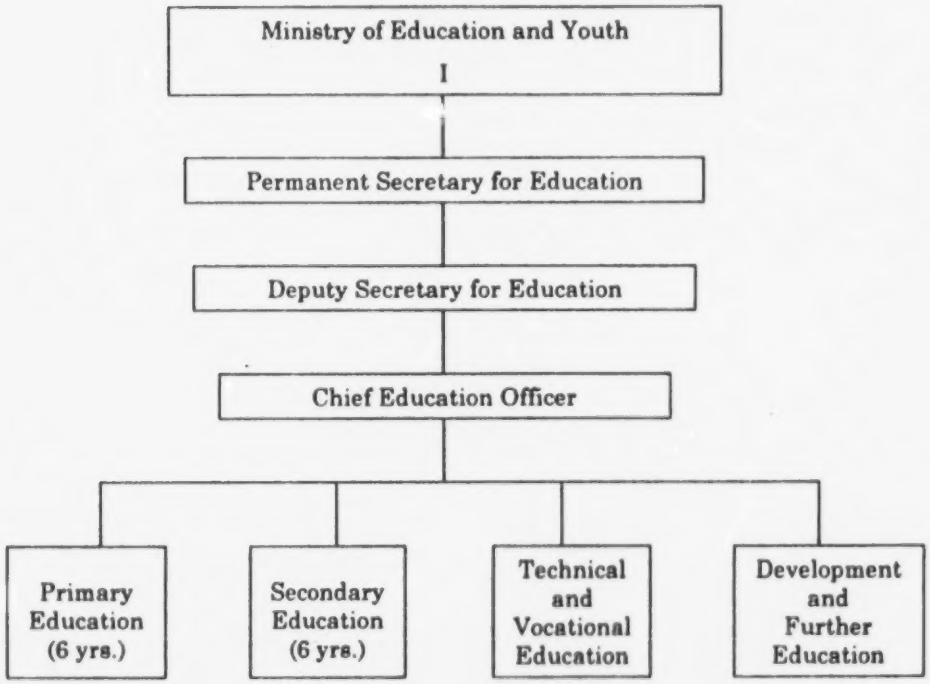
Chart III-4. Course Structure



4.5 Administration of FIT

1. Fiji Institute of Technology is a government institution functioning under the auspices of the Ministry of Education.

Chart III-5. The Organizational Structure of the Ministry of Education and Youth


Ministry of Education and Youth
Permanent Secretary for Education
Deputy Secretary for Education
Chief Education Officer
Primary Education (6 yrs.)
Secondary Education (6 yrs.)
Technical and Vocational Education
Development and Further Education

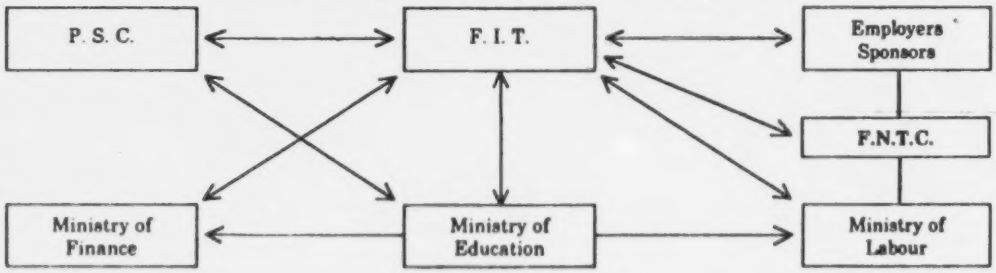
2. A Board of Governors comprises representatives from relevant private sectors institutions organizations and also from related government ministries. This Board is primarily envisaged to be an advisory body to the Ministry of Education, and is hoped to develop into a Council with wider terms of reference.

3. Institutional policies and, goals are initiated and drafted by the Principal and his staff and are discussed thoroughly with the Ministry of Education and the Public Service Commission for implementation.

4. There is direct, easy and effective two-way linkage with the Ministry of Education. Similarly, there is direct as well as indirect (through Ministry of Education, mainly on policy matters) linkage with other government organizations such as PSC, Foreign Office, Finance, Labour, etc. There is close and clear communication with FNTC that runs the apprenticeship

scheme. Also there is direct access to and from employers and their training officers. The Institute also caters for some of the training needs of Regional Countries and has direct liaison with their governments and the scholarship funding section of CFTC.

Chart III-6. Linkage between FIT and other Organizations



5. The new management chart is shown in Chart III-7. FIT Council was newly established under the Fiji Government Degree No. 18 of 1992 to ensure amongst its many functions to encourage the greatest possible participation in vocational training and evaluation of all citizens of Fiji.

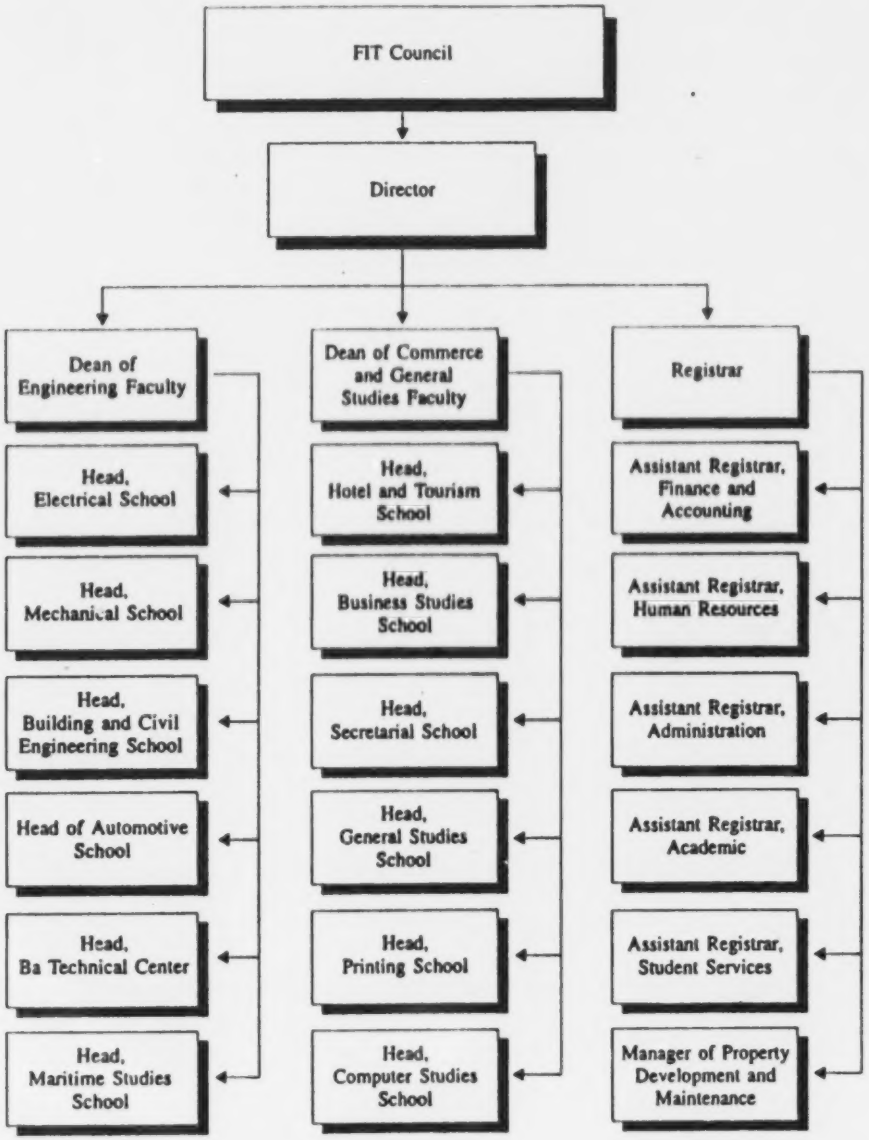
   Three main departments will be created.

   - **The Registrars Department** will be responsible for the general administrative and support services for FIT. It will be headed by the Registrar and six Assistant Registrars will be responsible for their functional areas
   - **The Dean of the Engineering Faculty (DEF)** will directly assist in the facilitation of links amongst the engineering schools and between the Faculty and the industries. This setup is important because the needs of the industries and the course contents which are offered by the institute can be integrated to ensure that FIT produces the goods.
   - Similar to the Engineering Faculty **the Dean of Commerce and General (DCGS)** will ensure better coordination and link between this faculty and the corresponding industries

6. The principal is responsible for the overall administration, management, planning and functioning of the institute through its Management Committee consisting of Vice Principal, Heads of Schools and Administration Officer.

   Academic Board governs all matters concerning curriculum development, examinations, results, certification, etc. It consists of all Heads of Schools, one elected member from each School, Examination Officers, Librarian and Administration Officer.

Chart III-7. FIJI - Education Investment Programme



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7. Each school is under supervision and guidance of its Head of School and works along Section/Department lines based on specialization of subjects. New ideas for the design revision and teaching of syllabus emerge from School Boards and industry representatives.

4.6 Staff Qualifications

1. Senior Staff (Heads of School, Lecturers) have University Degrees in their respective disciplines and also relevant industrial experience.
2. Others have diploma or certificate level qualification with additional industrial experience.
3. Rough breakdown of staff qualification is as follows:

Degree	55
Diploma	60
Certificate	75

4. About 20 posts are still vacant, and in the process of being filled.

4.7 Selection and Recruitment of Staff

1. Vacant posts are advertised and applicants are short-listed for interviews conducted by the Principal (Chairman) and three senior members of the school.
2. Appointments of lecturers, assistant lecturers and supporting staff are made by the Central Staff Board (Permanent Secretary for Education, Fiji Teachers Union, Fijian Teachers' Association, F.I.T. Principal) on the recommendation of the Principal.
3. For senior lecturers and Heads of Schools, Central Staff Board nominates the best suitable candidate to the P.S.C.

4.8 Processes of Technician Curriculum Development

1. F.I.T. does not have a Central Curriculum Development Unit yet. Individual schools design their curricula.
2. The school appoints specialist teachers/lecturers both from within the Institute, external teaching Institution, the profession and the industry concerned to form a group for curriculum design.
3. The team prepares a draft.
4. The head of the school together with the team revises the draft.
5. The draft is presented to a committee appointed by the Principal. The committee consists of the Head of the School concerned, two other Heads of Schools of related studies, and. two more of any other disciplines.

6. The committee, under the chairmanship of the Principal, revises the curriculum. The committee may recommend to the school amendments/additions, etc., mainly in areas of policies.
7. The final draft is presented by the Head of the School to the Academic Board and upon their approval is finally adopted.
8. Since 1977 - 1978 the local technician courses have been introduced and implemented. These syllabi are continuously assessed, modified and improved to meet the needs of new and modern industries equipped with machines based on modern technologies. Feedback on the industrial requirements is usually provided by the Apprenticeship Officers, Apprenticeship Training Board and the Board of Governors.

4.9 Student Evaluation

1. All examinations are internal.
2. Award of final certificate/diploma is based on:

Minimum Attendance	75%
Minimum Course Work	50%
Minimum Examination Mark	40%

4.10 Resource Centre

1. The Institute has a centralized Audio-Visual Aid Centre.
2. A move towards establishing a central unit for developing the assessment materials has been made in the Building and Civil Engineering School.

4.11 Classroom Situations

1. On the whole the student-teacher ratio is 25:1
2. The average class size for theory is 25, and that for practical 15.

4.12 Technical Teacher Training

1. **Programmes**

a) Formal Teacher Training Programme at FIT

Newly recruited staff who do not have teaching qualifications undergo this programme. This is a one-year day release course, attendance being required on, Wednesday and for one week full-time in the first and second term holidays.

An average of 15 staff undergo this programme each year, and since 1977 about 80 staff have gone through this training.

Syllabus:

- Basic and applied pedagogy
- English and communication
- Technical teacher techniques
- Educational evaluation and management

b) Industrial Training for Teachers

Arrangements are made with local firms for staff to have industrial training normally during school holidays. This may be from two-week to two-month duration.

Staff are also sent overseas for six-month to nine-month industrial attachment for specialization.

2. Staff Appraisal

Heads of Schools make annual confidential reports on their staff, and these reports are signed by the Principal and used for staff promotion.

Part V

TRENDS

Fiji, like other developing countries of the region, will strengthen, streamline and, to a certain degree, expand the TVET systems in order to equip a growing population with the knowledge and skills required for gainful employment as well as to set up their own enterprises.

Fiji also recognizes the rapid advances made in the field of science and technology which has relevance to TVET and the industrial growth and development..

With regard to TVET, specific trends can be summarized as follows:.

- the need for more enterprises-based TVET;
- the expansion of formal and non-formal TVET;
- a greater role for the private sector in providing TVET;
- greater emphasis on work-related experiences or vocationalization of education;
- greater and more extensive use of technologies to improve TVET;
- greater and closer co-operation and co-ordination between public and private sectors in providing TVET programmes.

These trends are emerging in Fiji and are expected to grow and strengthen with the passage of time.

Part VI

LIST OF TECHNICIAN EDUCATION INSTITUTIONS

Notations used in the list

1. Address
2. Courses offered

6.1 Fiji Institute of Technology

1. P. O. Box 3722, Samabula, Suva
2. a) **Automotive Engineering**
   - Ordinary Diploma in Automotive Engineering
   - Trade Certificate Courses
     Automotive Mechanics
     Heavy Mobile Plants
     Vehicle Electrical
     Panel Beating

   b) **Building and Civil Engineering**
   - Diploma Courses
     Civil Engineering
     Building
     Architectural Technology
     Land Survey
   - Ordinary Diploma in Construction Studies
   - Advanced Building Trade Certificate Course
   - Advanced Plumbing Trade Certificate Course
   - Trade Certificate in Carpentry and Joinery
   - Trade Certificate in Plumbing and Sheet metal
   - Water Fitters Certificate
   - Certificate in Sanitation and Drainage

   c) **Business Studies**
   - Diploma Course

- Certificate Courses

  Business Studies
  Data Processing
  Supervision
  Accounting
  Commercial Studies

- Advanced Certificate in Supervisory Management

d) **Secretarial Studies**

- Diploma Course
- Certificate Course

e) **General Studies**

- Ordinary Diploma Course in Industrial Laboratory Technology

f) **Electrical Engineering**

- Diploma Courses

  Telecommunication Engineering
  Electrical Engineering
  Computer Engineering

- Electrical Trade Certificate Course

g) **Hotel and Catering Services**

- Diploma Course
- Certificate Courses

  Hotel Accounting I, II
  Front Office and Reception
  Craft Cook I, II
  Housekeeping
  Food and Beverage

h) **Maritime Studies**

i) **Mechanical Engineering**

- Ordinary Diploma Course
- Certificate Course

  Fitting and Machining
  Plant Engine
  Refrigeration and Air Conditioning.
  Fabrication and Welding

j) **Printing**

6.2 Telecommunication Training Centre

1. P. O. Box 40, Suva
2. a) **Trainee Technical Officers Course**
   b) **Higher Technicians Certificate Course**
   c) **Trainee Technician Course**
   d) **Supervision and Management and Operational Course**
   e) **In-Service Training**
   f) **Pre-Technician Training**

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